

G R S IX 5]

Previous references

ml/47/15 sl/075

13 Feb 17

1917/18

(ml)

Later references

Reserve

File No

16417

Serial Nos

1, 2, 3, 4, 5, 6, 7, 8, 9

GENERAL AND REVENUE SECRETARIAT -

Serial Nos 1, 2, 3, 4, 5, 6, 7, 8 & 9

Part B for Sep/19.

SUBJECT.

Malarial Survey at Seringapatam

From The Sanitary Comm in Mysore
No G 397 of 12.3.18

Submits a report on the results of the
Malarial Survey at Seringapatam in
accordance with G O No 5060-3/ml/47-15
of 25.2.17. and suggests certain Anti-Malarial
measures to be undertaken for the
future town -

San D C Mysore. No O, on 24.7.15 1.17

slg -

Submits copy of the Seringapatam m.c.s.
resolution regarding the execution of certain works
in connection with the Anti-Malarial

And H. S. R. S.
5/11/19.

1917-18

GENERAL AND REVENUE SECRETARIAT.

2012

rel
 NOTES

File No 164-17

FILE HEADING

Malarial Survey at Serungapattam

From

The Sanitary Comm^y in Mysore

G.O. No 397

Dated 12.3.1918

Received 13.3.1918

Diary No 2212

Enclos 1

Spare Copies

Serial No 1

BRIEF ABSTRACT OF LETTER

Submits a report on the results of the Malarial Survey at Serungapattam in accordance with G.O. no 5060 3/nul/147 of the 25th February 1917 and suggests certain anti-malarial measures to be undertaken for the improvement of the town

NOTES AND ORDERS

(1) Draft Calling for the views of the municipal Council as regards the ways and means for financing the improvements suggested, is put up for approval & orders

AM
 18-3-18

(PTC)

NOTE—First Sheet.

Serial
No

(24) The survey was ordered by Govt-in No 875-2-17
At the same time the Public works Dept was asked
to prepare & submit estimates for closing up the
Karang. The Municipality requested to take
steps for the removal of rank vegetation. Proper
in these two matters has to be ascertained

(25) As a result of the survey the San Comm^r
recommends twelve steps for the improvement
of the town. He suggests that the following few
items may be left to the Municipal Council

- (1) Filling up & covering up wells not in use
- (2) Having fine-meshed wire-gauge cover
for wells that are constantly in use
- (3) Demolition of dilapidated houses &
keeping sites free of rank vegetation
- (4) Keeping backyards of inhabited houses
free of rank vegetation
- (5) Covering up brick-making pits now
in Karanj & preventing new ones being made

(26) The other seven items shown below he recommends
should be done by Govt through the P.W. Dept -

- (1) Closing of Karanj
- (2) Filling up moat near the monument
- (3) Draining marshy land opposite to bridge
- (4) Deepening the river channel north of the
North fort wall
- (5) Digging up the wells & pits in the Dams

Serial
No.Daulatpaya ~~ganga~~

(6) Preventing wet cultivation around the Daulatpaya or otherwise dealing with the wet fields to prevent breeding of malarial mosquitoes

(7) A complete drainage scheme which should be worked out before a water supply project is begun

(5) ^{Preparation of} Plans ^{to be} ~~of~~ these seven have been reserved in so quoted above. Some others may also perhaps be done by the M. Council. Though the San? says they cannot and the D.C. reported to the same effect in Dec '16 (Vid. file 147-15 put up)

(6) The ~~the~~ action that may now be taken is

1) to call for plans re for closing up the Karanys orders to be prepared in Feb' last

2) to ask D.C. to report progress in the removal of rank vegetation

3) to send him copy of San? Comm's ~~letter~~ and ask him to ~~report~~ ~~what~~ take action as regards items shown at A above and to report what others the municipality can undertake, and to report on the present financial condition of the mls. & the assistance he wd recommend from Govt

(7) A draft on these lines to the D.C. is put up. A draft to the Ch. Inf. also is put up for notes.

Chief Secy)

me
27/3/18

2272

G. R. S. III-2)

General and Revenue
Secretariat

ml File No. 164 of 1917-18

Serial
No

(9) The report is interesting & may be printed

(10) The draft may be approved -

Res Secy with compliments
for going

CH
27/8/18
20/3

(10) I agree - The question may, I
think, be pursued & brought to
disposal in the Municipal Section

Chief Secy)

72
1918

(11) I have no objection

CH
27/8/18

(12) May the draft be the Ch Engr's & the D & Comr
payable issue?

(13) The file may then be sent to the Secy's Member
for the then sent to the Mnd for further action
Ch Secy)

CH
4/4/18.

(14) The draft may be approved

Extraordinary Member
& 2nd member)

(15) Seen by the Extraordinary
Member who has appd of the draft to
the Ch Engrs and leaves the other to be a
see 2nd member

The draft may
come in next
section under
Res Secy's signature
after approval
by member

15/4

2212

(5)

G. R. S. III-21

General and Revenue
Secretariat

rel File No. 164 of 1917-8

Serial
No
2

To

The Chief Engineer
Letter no 6010 of 27 6 - 1918

Invites attention to G.O. no 5040-3
ml 147-15-15 of 5-2-1917 re. the
improvements to Seerungapata and enquires
how the work of preparing plans and
estimates for filling up the Karanjis
stands at present

3.

To

The Dy Comm^r Mysore St
Letter no 6011 of 27 4 18

Forwards a copy of the 1st and requests
to inform what works the municipality
can undertake from its finances excluding
those which ought to be done ^{from} at municipal
funds

(16) Submitted with a draft to the Supt Govt
Press with reference to para (8) of the notes

AM
30/4/18

(17) Issue

MS
1/5-

4

To the Supt Govt Press.
no 6378 ml of 11-5-18

Forwards sl. 1 ~~to the~~ with a request
that it may be printed and that 10
printed copies may be su^d for
other office

Jul. 16-47

(6)

ROUTINE NOTES

[To be used only for notes, requisitions, etc., not intended for permanent record]

Submitted

(186) In accordance with
 para 8 of the note under
 - being some copies of the
 report of the national
 survey of Seimopetum
 have been ~~received~~ ^{printed} &
 received. A typed copy
 of the report has been sent
 to the Dr. Lyphone for
 furnishing certain informa-
 - tion on the subject

If approved, the ~~copy~~ printed
 copies may be sent to the
 Sent Records

12/1/47 May not some
 copies be sent to the
 Dybr & the Sang for instead
 of all the 100 copies kept
 in the our Records?

N B - Should routine notes be written on small slips
 the notes must be copied or slips pasted on this form

GRSM 5927

(190) Yes, send a few copies to the
 San? & the D C also place
 copies on the table of the Rev
 Sec. & Chief of

For 2-1-47
 for here &
 need not
 answer

Jul 16/7

ROUTINE NOTES

[To be used only for notes, requisitions etc, not intended for permanent record]

Submitted with a draft
 forwarding a dozen printed
 copies ~~to each~~ each
 to the Yang Lame &
 the Inspector & Chief Clerk
 & the Chief Clerk has
 been asked to prepare
 plans & estimates for filling
 up the Karangs, her
 name also is included
 among those officers to whom
 the printed copies are
 forwarded

16/7
 Issue
 17/7

3 copies to the Chief & the Clerk
 & 2 copies to the Hon. Secy to Govt

N B - Should routine notes be written on small slips
 the notes must be copied on slips based on this form

1530.

(8)

General and Revenue
Secretariat

Indl. File No. 164

of 1917

Serial
No

5 To ~~the~~ Chief Engineer
the Sany Court and
the Dy. Commr - Mysore St.
Nos: 1358, 1359 + 1360 respectively

By 20-7-18
forwards 12 printed copies of
the Sl. 1 for information or distribu-
tion if necessary.

6 From the Sany Court in Mysore -
No G.C 61-3 - 2 31-7-18
With reference to Sl 5 above, submits
for information of Govt a copy of a
circular letter addressed to the
Presidents of the Distt Boards re-
commending the adoption of a
material survey wherever necessary
(v) No action, at present, seems
to be necessary on this commun-
ication.

(vi) But it appears to be high time
to expect replies from the Chief
Engineer and the Dy. Commr Mysore
St. to the enquiries made in
Sl 2 + 3 above in April last.

Subd. for orders -

H. B. M.
15/8/18.

NOTE—Contn sheet

Ind. File No *164* of 191*7*

(9)

Serial
No

(2)

(11) Remind of all signs

(2) I think the chief ^{mgr} has already submitted an estimate for the closing of the Karayuccas & ~~they may~~ the estimate has also been approved.
Please find out MX

$$\frac{m\kappa}{17518}$$

(24)

17818
(245)
P. 19.8 v. Draft - Reminders to the Dy Comm.
Reynolds - It is put up for appl.

(2) After the issue of the reminder further action will be taken as directed above

Subd
~~H-2~~ PM
23/8/15

(26) 1500 mm
23/8

7

From the De Wispere

NO. 82 Dec 72 24 18-13 9 31 & 18

States that the Council is not in a position to undertake the execution of any other work than those mentioned in §(3) & recommends the execution of the remaining items of work from State Funds under the supervision

175 P 20 20

(vii) The five taxes of work undertaken by the municipality are

(1) Filling up or covering up
wells not in use

B

(10)

Serial
No

- (2) Drawing fine-washed wire-gauze covers for wells that are constantly in use
- (3) Demolition of dilapidated houses & keeping sites free of rank vegetation
- (4) Keeping backyards of inhabited houses free of rank vegetation
- (5) Covering up, brick ~~making~~ pits now in Langun & preventing new ones to be made
- (28) The other items of work recommended for execution from State Funds
 - (1) Clearing of Karanjis
 - (2) Filling up moat near the monument
 - (3) Draining marshy land opposite the suspension bridge.
 - (4) Draining the river channel north of the north fort wall
 - (5) (6) Dealing with wells & pools in the Daria Doulat bagh and otherwise dealing with the wet fields to prevent breeding of malarial

(11)

G. R. S. III-2,

General and Revenue
Secretariat

Ml File No 166 of 1918

Serial
No

Majistres.

(29) A complete drainage scheme which should be worked out before a water-supply project is begun.

(30) As regards No. 1 viz closing of the Karanys an estimate for Rs 2627/- has been sanctioned in G.O. No. 580-1/Ml 159-17-508.7.18, the cost being met from State Funds. Another estimate for Rs 75,370 for the water-supply to the town is pending sanction of Govt.

(31) It is a point for orders whether Govt are prepared to finance the other items of work as suggested by the Sanitary Commⁿ (in addition to the water-supply scheme for which the Municip^y has promised to find only the annual maintenance charge, and if so whether detailed estimates of work may be called for from the Chief Eng^r for each item of work.

Mm.

21/9/18 (32) The entire question of improvements to this historic place is a question of time and has been urged for the consideration of Govt. for a number of years now as the plans put up below will indicate. The mⁿ

redeclined file

Flag 3

File No. 16.4 of 1918

(12)

Serial
No.

unfortunately not in a flourishing condition and its finances are very low. The city cannot with great difficulty meet the maintenance charges even of its water supply. A scheme has been drawn up at a cost of Rs 75,370 for water supply to the town and this is pending order. (Please see minutes of the 2nd meeting in the linked file). Along with the general order re water supply schemes, this file will also be sent. The San'yam Committee considers that the water supply scheme should be taken ^{up only} after the completion of the drainage ^{Scheme} (Vide blue pencil mark Flag 2). In this connection, the discussions in File No 147-15 may be advantageously referred to. The proposals of the San'yam Committee mainly relate to drainage problems and ~~the~~ ^{two} of the items referred to in the Final Note of the 2nd Meeting (enclosed in the above mentioned file (Flag 7)), relate to ~~these~~ this aspect of the improvement work. If the improvements suggested in the Final Note are carried out, a great deal will have been done for the town and what remains will be a minor part only. The total cost of these improvements including water supply amounts to a little over 2 lakhs roughly and the whole of this amount will have

for

File No 164 of 1918

C13

Serial
No

found from State funds in the near future
 of the town is to be rendered thoroughly sanitary.
 It may be stated here that there is no likelihood
 of this amount being available from the
 usual grants under 30 Public Improvements
 in the budget ^{of the next few years}. There are already a number
 of water supply projects getting ready for
 execution for which Govt. ^{have} promised a
 contribution and no savings are likely to
 be expected under other heads in the near
 future if the programme of works relating to
 them is regularly carried out. The question
 of Municipal Improvements therefore
 will have to be a separate item in the
 budget for which a separate provision
 will have to be made annually for the
 next 4 or 5 years in case it is decided that
 the improvements should be completed
 within ^{a reasonable period} ~~5 years~~. This would mean that this town
 will have to be given a preferential treatment
 just as the T B Hygiene & City Improvement for
 Bangalore, on account of its historic importance.
 If the entire scheme of improvements is
 spread over 5 years, it would not require
 more than 50000/- annually for carrying
 out the improvements necessary. The
 amount may perhaps be raised

financial aspect of the question is decided
submitted for order

mx
21 9 18

Rev Secy (32) A liberal grant from
State funds in the manner
proposed in the above note
seems to be the only way in
which improvements can be
to this town can be effected
Such help appears to be jus-
tified also having regard to
the special circumstances explained

319
28 9 18

2nd member)

mx
24 9 18

33. I think several matters were
mixed up in this file

34. The material concerning the
he dealt with in a Sept 80

35. It reports upon the
4 ahead who there
looking that Haydel

3327

15

G R S III-2]

General and Revenue
Secretariat.

File No. 164 of 1918

Serial
No.

File 7

36. Please see 4075: 5040-3
sub 147.15.15 dated the 25th Feb 1917
which directs that the cost of
closing of Karanji will be met
from State Funds for which plans
& estimates may be submitted for
sanction by P W D & that the
melioral survey & the removal
of rank vegetation should be
undertaken forthwith by the
reel at their own cost

[Signature]
1/10

Recd 3 10 18

This may be kept
up in hand
of 50-rupee
spat is what used
which acts on should
undertake this work
will have to be

[This is one of the 3 files
which were found missing till
now & for which search was
being made. On the 25th
when the Supt was absent
on casual leave, the 3 fil
were found in a tray on his
table - As instructed by the
Asst Secy, enquiry will be
made as to where the file
was till now & who is re-
ponsible for hardening this
& the result reported]

Further action may
be taken by the case - 1001
27219 was directed by the

in the case of the members
of the committee
to be sent to
the place
to be made
to be made
to be made

27219

Serial
No.

Sub. with a draft is instructed

H.M.

37 Revised Draft is subd. & separate
action has been taken in regard to this file
having been mislaid, which accounts
for the delay in its submission.

MX
19 3 19

Rwtee)

Temporary
member
& Dewan -

38 Within

7/4

MX
3 4 19

clean typed draft
be kept in file
before submission

3968
5-4-19

DEVANS OFFICE
Recd on APR 19 1919
Reg to 64 4 7

39. There is no report as yet for
the present delay. Very much
more exp. is the (the) report
The work is drafted and
known here.

What is the time that is now
being passed.

regard the action to be taken in respect of
the items mentioned in the Survey & ...

(37)

G. B. S III 2]

General and Revenue
Secretariat

File No 164

of 191

Serial
No.

in paras 4, 5 & 6, The malinal survey was undertaken with a view to the front order at Flag K. Report is also invited to Flag 7 which (Final Rpt) Summarises all the improvements necessary for the Town. As this note clearly takes into the into noticed in the malinal survey Report, all that could be done was to review the report. 41 The water supply question has been included in the general programme ^{in the} recently water supply scheme and the file separately subd for orders re financing and allied matters. 42 This file was lost during the hunting out ^{due to} ~~the~~ the destruction of work on account of influenza and was traced after a long search only at the end of Feb. A complete enquiry ^{into its loss} has been made and the papers subd to the Chief Secretary. ~~The delay~~ The delay is now the less regretted.

Red Seal)

Temp Member
& Dewan -

27/4 1919

21 4 19

22 4 19

Approved as revised

27 4 1919

4251
23 4 19

DEWAN'S OFFICE.
Recd. on APR 29 1919
Flag No 6729.

This note has to be subd again Para 5 requires a further ^{modification} Note - Contn sheet. Shall speak to Secy.
 17/5

Serial
No.Amended:-

attention is respectfully invited to the correction made in para 5 of the draft order in the file. The first portion of that para does not fit in properly with the alteration made by the Dewan Sahib. The 2nd Council beside have definitely represented their inability to carry out the works or duties stated in that para.

In view of this, orders are respectfully solicited whether the para in question may not be further revised.

Dewan)

revised again

MC
5/5/19

Mc 1422/140 Luce 14/11/1919
Dewan Scheme & diff

4
16/5/19
Issue 14/5/19

DEWAN'S OFFICE

Recd on MAY 7 1919

Reg No 6491

awd
Lus

To the De. Supre

No 1543032 & 23-5-19

Calls for a report as to
progress had been made
the execution of CE & Co
in Serungpetam burning & its
connection with the
measure

NOTE—Contn sheet

2890

G R S II-2]

General and Revenue
Secretariat

ul File No 166 of 1917

Serial
No.

9

From the Dr. Geyare

No. 8, Dec 26 2 15 9 9

Submit copy of the Seru Copolan
but also resolution regarding the
execution of certain works in
connection with the state-malaria
measures

The municipality does not
seem to be very keen about the
improvements. The resolution of
the which is to the effect that the
work should be taken up as funds
permit. The closing balance of the
municipality is only Rs 1838 no
provision for these works has
been made in the current year's
budget. Subd for orders

Q

22/9

For perusal.

ul

24/9

Second meeting

MX
24 9 9

1542
25 9 9

ul

20/10/19

MX

2190 20

of 191

Then may, if approved be
recorded in B.

Yes

29/10



with

4/11/19

NOTE—Contn sheet

250397 2012

24

Office of the Sanitary Commissioner
with the Government of His Highness
the Maharaja of Mysore,

922/2

hd 164-17-1

Dated, Bangalore, 12 3 1915

From

M Srinivasa Rau Esquire, MA MD B Sc (Edin)

D P H (Cantab) & F C S (London)

Sanitary Commissioner with the Government of His
Highness the Maharaja of Mysore, Bangalore

To

C S Balasundaram Iyer Esq, B A.,

Chief Secretary to the Government of His Highness
the Maharaja of Mysore, -----Department,-----

BANGALORE

Via

I have the honor to forward my report on the
malarial survey conducted in Serangapatam from July to
December 1917, in accordance with the Government Proceedings
No 5040-3-W1 147-15-5 dated 25-2-1917.

2. Serangapatam was becoming notoriously unhealthy
and the population of the town was going down steadily
Considering the historic importance of the town, the Govern-
ment were pleased to give an annual grant of Rs 1000/- to the
Municipal Council for its "improvement" This amount used
to be frittered away on clearing of lantana here and there
with no perceptible improvement in Public Health. The
extreme measure of demolishing the whole town, with the
exception of temples, mosques and buildings of historic
interest and constructing a new one elsewhere was also
seriously proposed

3 It was well known that malaria was the most
important disease that the town had to contend against and
in a general way it was believed that draining the swamps,
filling

hd

19
From 5 MAR 1918

By The Sanitary Commissioner
in Mysore, Bangalore

To

AS
The Secretary to the Government
of H H the Maharaja of Mysore,
Gen Department
Bangalore

Dated 12th March 18

Despatched

Received

General No Q c 39710484
No

Enclosure No one

SUBJECT

*Submitting a report on the
results of the malarial survey
carried out at Srirangapatna.*

sd/ hnt u/s

*Ww
13/3*

filling up pools of stagnant water and oiling those which could not be drained, would render the place less malarious. But definite information on any point was wanting and there appeared to be no justification for wasting public money on measures of doubtful utility. The desirability of finding out the root cause of the decay of the town and utilising the annual grant of Rs 1000/- for this purpose was placed before the Government who were then pleased to sanction a scientific malarial survey which was accordingly begun in July 1917 and finished in December of the same year.

4 The malarial survey has brought to light a mass of facts on the basis of which it has been found possible to make definite recommendations for fighting malaria. The large number of actual breeding places of Anopheles was certainly never suspected. The part taken by the river channel on the northern side of the Fort wall, by the marshy tract near the suspension bridge, by the stagnant pool of water near the monument, by the paddy fields round the Daria Doulat Bagh and by the bathing ponds in the Daria Doulat itself, has been rendered clear and the very breeding places of Anopheles are now proposed to be utilised for fighting malaria by converting them into breeding places for larvicidal fish and beetles. The survey has also revealed that such fish and beetles need not be imported from outside but are available in any quantity on the spot and that only a little organisation is needed to range them on the side of humanity in its contest against malaria.

5. For purposes of the survey, Serangapatam was divided into a number of blocks. A separate map for each block has been prepared on which are marked, the actual and potential breeding places of Malaria-transmitting and non-malaria-transmitting mosquitoes. From all the actual breeding places, larvae were collected and the adult mosquitoes which were observed to breed from them were collected and identi-

h/✓

identified. Definite breeding grounds have thus been associated with the production of dangerous carriers of infection. Adult mosquitoes were collected in the houses and they were identified and subsequently dissected for finding the parasites in their stomachs and salivary glands.

6 All the children under 12 years were examined and the number of those showing enlargement of spleen determined and their addresses noted in a separate register. A number of blood slides were examined, and those in which malarial parasites both benign and malignant were found, were noted.

7 A number of experiments were made with varieties of local fish and water beetles, to determine their powers of eating up the mosquito larvae.

8 The details of the results of the malarial survey are to be found in the annexed memorandum.

9 A malarial survey is a mere preliminary to the application of anti-malarial measures. The ones that are most urgently required are -

(a) Closing of the Karanjis. This is a measure the necessity for which has already been recognised by the Government in their Proceedings quoted above. But no action has been taken up to the present moment. Water is let into the Karanjis from the Bangaradoddi channel. Putting up a stone slab at the opening to prevent the ingress of water into the Karanji channel can be done in a day. As the hot weather is beginning, the Karanjis will dry in no time. The level of the sub-soil water will be lowered soon and the amount of water in the wells will also rapidly diminish. The adoption of this simple measure will materially lessen the number of breeding places of Anopheles. Subsequently the Public Works Department may close the karanjis themselves in

whichever

22/7

whatever manner they choose

(b) Such of the wells as are not in use and which have been shown to breed Anopheles may either be filled up or covered with stone slabs and the joints cemented, to prevent mosquitoes from having access to the water

(c) Such of the wells as are in constant use, should be covered up by means of wooden frame work fitted with 2 shutters of wire-gauze of mesh not over 1/16 inch. These should be kept closed at nights and on other occasions when the wells are not in use

(d) At the western end of the island, near the monument, there is a portion of the moat with stagnant water This can easily be filled up with the earth that is there close by.

(e) The marshy piece of land lying to the left of Fort gate opposite the suspension bridge must be drained into the river

(f) The river channel that runs close by the Fort Wall on the North side, forms a series of stagnant pools in its zig-zag course The training of this channel so that the water may flow freely without forming pools on its way is necessary The clearing of weeds growing on either side of this channel is very essential

(g) In the garden round the Daria Doulat there is a very large number of breeding places of Anopheles This number can be greatly reduced by dealing with each in the particular way recommended.

(h) The paddy fields surrounding the Daria Doulat Bagh have also been proved to be breeding places of Anopheles. Putting a stop to this wet cultivation is certainly the best

remedial

Ad -

remedial measure But if the loss of Revenue to the Government is considerable, the old bathing ponds on either side of the Daria Dowlat may be made the breeding places of small larvae-eating fish found locally and the fish may be distributed evenly in the paddy fields during the time that water stagnates there The water beetles that also abound there may be used for ridding the paddy fields of Anopheles larvae

(i) All dilapidated houses should be razed to the ground and the vacant sites should be kept clean and free from rank vegetation

(j) The back yards of all inhabited houses should be kept free from rank vegetation.

(k) Borrow pits for brick-making found in Ganjam should be filled up and no new pits should be allowed to be made

(l) The question of a complete drainage scheme should be taken up and proper drains constructed for the disposal of town sewage and of storm water The existing drain in Purniah's lane should either be improved and incorporated into a new system or closed up altogether It is at present of no utility except as a refuge for bats

(10) It is only after the drainage scheme is carried out that I would recommend the consideration of a Public Water supply to Serangapatam The people are bound to clamour for the latter to be given the first place If this is acceded to and public fountains are set up all over the place without making any provision for the carrying off of waste and surplus water, any benefits accruing from the adoption of anti-malarial measures suggested above will be nullified and the malarious condition of Serangapatam will be worse than what it is at

present

present Other places have suffered in public health from the installation of public water supplies without previous provision of a proper system of drainage

10 The Municipal council of Serangapatam should bear the cost of carrying out the recommendations made under headings (b) (c) (i) (j) and (k) One Sanitary Inspector with a special gang of 6 men should be sufficient to maintain the anti-malarial operations, when once begun The rest of the work noted under headings (a) (d) (e) (f) (g) (h) and (l) appears to me to be beyond the means of the Municipal Council It therefore rests with the Government to come to their help either by undertaking the work through the Public Works Department or by making the necessary grants to the municipal council I am of opinion that the former procedure would be the best

11 Any expert advice that the Council may need, will be placed at their disposal either by myself or by the District Sanitary Officer, Mysore District

12 Before concluding, I may be permitted to add that if these recommendations are carried out in their entirety, there is no reason to doubt that the condition of Serangapatam will be greatly ameliorated and that the Government will have the satisfaction of coming to the rescue of a town that has played such an important part in the History of Mysore, preserving it from the extinction to which it now appears otherwise to be doomed

I have the honor to be,

Sir,

Your most obedient servant,


Sanitary Commissioner

MEMORANDUM ON THE
MALARIAL SURVEY OF SERINGAPATAM
----- 0 -----

Seringapatam is an island 3 miles long from east to west and at its widest portion it is 1 mile wide. The western portion of the island is Physical features. Seringapatam proper and the eastern portion is occupied by Canjam. For purposes of Municipal administration, Wellesley Town and Paschimivahini are included within Municipal limits.

2. The island is a rocky knob with a steep slope to the north and a ^{gentle} ~~rather~~ one to the south. The underground geology rock consists of a soft micaceous gneiss with bands and patches of hornblende and talcose schists. Much of the soil is derived directly from the underground rocks. The river brings in no deposits of silt. The soil is retentive of moisture and the free flow of sub soil water is checked, bringing about a condition of water-logging. The average annual rainfall is 27.72 inches. In 1916 it amounted to 34.05 inches and in 1917 to 27.45 inches.

Decennial fluctuation in population

3. The population has been going down since 1891 as the following census figures show

Census of 1871 show a population of 10,954

„	1881	„	11,734
„	1891	„	12,537
„	1901	„	8,534
„	1911	„	7,372

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The latest Khaneshumari figures for 1917 show that the population has diminished still further to 7004 made up as follows

Seringapatam proper 2897
 Canjam ... 3493
 Paschimavahini . . 49
 Wellesley Town ... 565

Statistics of inhabited houses

4. The following figures give an idea of the number of houses both inhabited and in ruins

Seringapatam proper has 1256 inhabited houses
 „ 369 houses in ruins
 „ 331 vacant sites
 Canjam has 1597 inhabited houses
 „ 539 houses in ruins
 „ 501 vacant sites
 Paschimavahini has 8 inhabited houses
 „ 42 chattrams
 Wellesley Town has 28 inhabited houses
 „ 66 houses in ruins
 „ 18 vacant sites
 .

Recorded vital statistics for five years

5 Vital statistics for a number of years show deaths are always in excess of births

	1912-13	1913-14	1914-15	1915-16	1916-17	Total for 5 years
Births	108	89	82	85	131	495
Deaths	177	122	212	119	242	872

The excess of 377 deaths over births, practically accounts for the diminution of 368 in the Khaneshumari figures from the 1911 census figures



figures.

Prevalence of malaria as borne out by
Dispensary statistics.

6. Hospital statistics show the prevalence of malaria
in the town, the admissions being as under -

Year.	Total number of patients seeking admission	Total number of cases for malaria
1911	12,739	4647
1912	15,679	4327
1913.	18,041	6770
1914.	16,880	6661
1915.	16,504	4258
1916	16,643	3994
1917.	17,381	5429

In 1911 and 1912, the karanjis were blocked up and no water was let into them, the people being obliged to go to the river for water. But in June 1913, the Municipal Council got the karanjis opened and cleaned, and let the water into them. It is interesting to note that the number of patients that sought medical advice in the Local Fund Dispensary for malarial fevers only amounted to 4647 and 4327 in 1911 and 1912 respectively. In the first half of 1913 when the karanjis were still closed, only 2525 patients having malaria went to the Dispensary, whereas in the second half of 1913, the number went up to 4245 simultaneously with the entry of water into the karanjis. This fact is of course very significant pointing to a real connection between water in the karanjis and a rise in the malaria figures. It was after this that the Government in their order quoted above, sanctioned the closing of the karanjis at Government cost. No action has yet been taken by the Department of Public

hsh

4.

Public Works in this matter.

7. The agency for conducting the survey consisted of Sub Assistant Surgeon Mr. B. Parthasarathi Iyengar who

Agency and period of its employment. had already been conducting a similar survey in the Bangalore City

We had a Drafts-

man and 2 Attendants under him subsequently when the Government decided on having a malarial survey in Nagar Taluk of the Shimoga District, three Sanitary Inspectors Mr. M. Hanumanta Rao, Sankar Rao, and Venkatakrishnappa were deputed to undergo training under the Sub Assistant Surgeon These men, after a time, greatly helped in completing the survey within the prescribed period

The Sanitary Commissioner was supervising the work, visiting the town every month that the survey was in progress We are glad to bear the testimony to the way in which Mr Parthasarathi Iyengar has carried out his duties To him is due all the credit for bringing the survey to a successful conclusion without rousing any opposition on the part of the people not accustomed to this kind of investigation

3 It is beyond the scope of this report to go into other than merely the salient features of the investigation,

Results of survey. tion, in so far as it bears on

the proposals put forward from

time to time for the sanitary improvement of the town For purposes of adopting the routine anti-mosquito measures and quinine treatment on an extensive scale, the block-plans and the special registers constitute a most valuable basis for action The data will be placed at the disposal of the Municipal Council as soon as work and proper staff to carry it out are organised in



5.

in accordance with the suggestions offered in the accompanying letter.

2. The area surveyed was parcelled out into divisions the boundaries being defined as shown under. The

General sanitary conditions. insanitary features shared in common by all the divisions are the absence of a drainage system and consequent stagnation of sewage, want of conservancy, maintenance of manure pits and manure heaps in the back-yards of houses, the existence of numerous dilapidated houses and of vacant sites overgrown with rank vegetation, and the universal fouling of all places if ^{but} slight shelter or privacy be available.

The limits of Block I were fixed as the river Kaveri and Rampart Road on the north, Rampart Road to the east, Bazaar Street to the south and Lawyer's Street to the west. The area is studded over with karanjis, which render the locality damp.

Block II bounded on the north by Bazaar Street, east and south by Rampart Road and west by Kalemma Temple Street, is characterised by absence of karanjis but there are several unused wells containing putrid organic matter. The locality is noticeably free from dampness.

Bazaar Street on the north, Lawyer's Street on the east, Rampart Road on the south and Railway line to the west formed the boundaries of Block III. In this block the houses are few in number but the usual insanitary conditions prevail.

Block IV is the area enclosed by the river and fort wall on the north, Lawyer's Road to the east, Railway station Road to the south and the railway line and railway quarters to the west. The houses are few but the prevailing sanitary conditions are above the average. There is a small moat at some distance behind the railway

hs

6.

railway quarters which is responsible for intensive breeding of mosquitoes.

Kerangur town has paddy fields to the east and west, the Cauveri to the south and the Bangalore Road to the north. The houses are damp and ill-ventilated

Paschimavahini - Mysore Road and paddy fields to the north, the Paschimavahini river to the east and south and garden and paddy fields to the west. The back-yards of houses and vacant sites are overgrown with rank vegetation. The level of subsoil is very high - 3 feet

Canjam was divided into

Block I - North by Karighatta Mohalla Road, fields and gardens, east by Lodder's Street, south by fields and gardens and west by Road leading to Seringapatam Fort. There are no drains. Manure pits, rank-vegetation and cess-pools abound.

Block II - North by Karighatta Mohalla Road, east by Sukravarpet and Gumbaz Road, south by Gumbaz Road, and west by Lodder's Street. There are numerous dilapidated houses overgrown with rank vegetation. Drains contain stagnant sewage.

Block III - North by Cauveri, east by fields, south by Karighatta Mohalla Road and west by Chinnakannu-swami Mudaliar Street. Peetharkeri and Agasarkeri are congested and the houses are ill-ventilated. There are a few dilapidated houses overgrown with rank vegetation and used as latrines.

10 The method employed for gauging the prevalence of malaria was the commonly accepted one of determining

The Splenic Index. the number of splenic enlargements in persons under 12 years of age. The following statement shows the splenic indices of the various component blocks of the area where- in the investigation was conducted



7.

conducted

Area	Block	Number of children under 12 years of age	Number of children that had enlarged spleens	Splenic index expressed as percentage.
Seringapatam	I	421	81	19%
	II	413	58	14%
	III	36	34	94%
	IV	35	9	26%
	Total	905	182	20%
Terangtoro	-	36	7	19%
Aschimavahini	-	12	6	50%
Canjam	I	221	40	18%
	II	250	49	20%
	III	558	46	8%
Total for Canjam		1029	135	13%
Whole area surveyed		1982	330	17%

Out of a total of 1982 children under 12 years of age examined, 330 had enlarged spleen, giving a ratio of 17 per cent

The worst affected areas are blocks III and IV in Seringapatam Canjam - particularly Block III therein - is, from the point of view of malaria, very much healthier than Seringapatam proper



proper.

11. As will be seen from the following statement, the average level of subsoil water in the several blocks

The level of subsoil water. ranges between 3 feet in Paschimavahini to 37 feet in Block I of Ganjam. The data at our disposal shew that the level of subsoil water influences, in an appreciable degree, the intensity of prevalence of malaria in a locality.

Area	Block.	Level of subsoil water in feet
Seringsapatam	I	15
	II	27
	III	13½
	IV	17
Keranggrā	-	6
Paschimavahini	-	3
G a n j a m	I	37
	II	20
	III	23

12. The following statement shews the number of wells and karanjis both in use and disuse in the various blocks

The prevalence of mosquitoes. and the number in which mosquito larvae were found. That almost all the wells and karanjis that are no longer in use breed malarial mosquitoes to a much greater extent than those in use is a very significant fact. When, associated with the numerous karanjis and wells in disuse, there exists an endemicity of malaria (eg., Block III of Seringsapatam), the conclusion is obvious. This data appear to justify the assumption that the unused karanjis, far from being merely harmless relics of a past age, serve as predominant factors in the propagation of malaria, having perhaps the most and one or two hundred

Area	Block	Wells in use				Wells ^{not} in use				Karanjis ^{not} in use				Other breeding places	Mosquitoes found here & larvae
		A	B	A.	B	A	B.	A	B.	A	B				
Serirgapatam	I	149	54	12	1	54	45	5	2	-	-	A Rossi, A Stephens, Listoni, Culficacies & Culex.			
	II	39	18	-	-	24	23	-	-	-	-	A Stephens, Listoni, Culficacies & Culex & Stegomyia			
	III	9	4	7	0	6	5	10	8	3 Pools of stagnant water		Do Barbicostles			
	IV	16	10	4	3	3	3	1	1	2 Do.		Do A Rossi			
Paschiravahini	-	2	1	-	-	-	-	-	-	3 Pits, 1 pool, 3 channels & 1 big swamp		A Listoni, Barbicostles, Rossi & Culex.			
	-	3	1	-	-	3	3	-	-	1 Unused pond & Rice Fields.		A Listoni, Stephens, Barbicostles & Culex			
Ganjam	I	23	14	-	-	12	12	-	-	3 Pools & pond		Do			
	II	30	19	-	-	12	12	-	-	4 Pits & 1 channel		A Stephens, Rossi, Culficacies & culex			
	III	70	25	-	-	15	15	-	-	One pool		A Stephens, Listoni, Rossi, Culficacies Barbicostles and Culex			

A = Total number
B = % in which mosquitoes
larvae were found

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10.

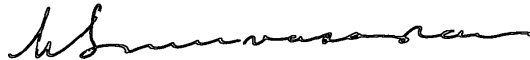
Many portions of the fort moat have been converted into gardens which get their water supply from the karanji channels. These also form good breeding grounds for the mosquito larvae. There are also two large marshes one near the monument at the west end of the island and another to the left of the south gate, behind the suspension bridge.

These form unfailing breeding grounds for malaria transmitting mosquitoes and by themselves can propagate malaria in the whole of the island all throughout the year.

There are 18 wells and ponds and 4 karanjis in various portions of the moat, 8 of which actually breed the larvae and others form potential breeding grounds.

The river channel running parallel ⁶with the northern wall of the fort forms numerous pools in its zig-zag course. These pools contain larvae from which anopheles stephensi, Listoni, Barberostris, Pulcherrimus, and Culi-facies were bred.

The Daria Dowlat Ragh and its surrounding paddy fields were also surveyed. Larvae were observed in 17 of the 23 channels, 6 out of the ten cisterns, 15 of the 18 pits and in all the paddy fields. The mosquitoes bred from them were identified as A. Rossi, Listoni, Culi-facies, Barbirostris, Nigerrimus, Stephensi, Punctulata, Culex and Stegomyia.



M.A , M.D. , D.P.W. ,

Sanitary Commissioner

P.H.

G R S 26]

37

File No ml

Serial No K4-17

Diary No of letter replied to 222

General and Revenue Secretariat

()
, the 191

To

The Chief Engineer

Date of issue 29-4-18

Signed by *W. B. T. K. S. S. S.*

En

I am directed to write attention
to G.O. no ⁵⁰⁴⁰⁻³ ~~21167-15~~ 5217 regarding the
improvement of Benagalapur and to
request to be informed how the work
of preparing plans estimates for filling
up the Kanungs stands at present

I have so.

W. B. T. K. S. S. S.

27/3/18

Ch. Secy, Govt.

W. B. T. K. S. S. S.
27/3/18

over

SUBJECT

List of enclosures

Copied by

Examined by

~~672-25,000-25-11.~~

21/2/1974
S R S 261

38

File No ^{ml} 164-17
Serial No

21/2/74

Diary No of letter replied to *21/2*

General and Revenue Secretariat
()
, the 191

No *6011*
ml 164-17-3
21/2/74

To

The Deputy Commr
Mysore Dist

Date of issue *29.6.18*

Signed by *Mr B. G. Shastri*
K

Sir,

With reference to G.O. *5040-3*
ml 164-17-45

dated 5.2.17 regarding the improvement of
Sempapaliam Town. I am directed to
forward you herewith copy of letter G.O.
no 397 of 12.3.18 from the Sand Commr
in Mysore with a copy of the enclosure thereto
and to request to be informed what
action has been taken by the Sempapaliam
Municipality in pursuance of the order
referred to above for the removal of grants

over

SUBJECT

21/2/74

32

vegetation, and to suggest that as the items
of work noted in the margin of those recom-
mended by the Sanit Commⁿ can be early
executed and without much cost the
Municipality may undertake the works
immediately and complete them as early
as practicable. I am also to request
that you may in consultation with
the Ind Council indicate what other
items the M^{ty} can undertake and report
the present financial condition of the
Municipality to the Govt and send up
your recommendation in the matter to enable
Govt to decide what assistance may
be given to the M^{ty} in respect of them.
The favour of a very early reply
is requested.

I have to

Yours

Ch Secy to Govt

Yrs

27/3/12

W
7.4

List of enclosures

Copied by

Examined by

No. 1007/18-19
 No. 1 -
 REVENUE.
 3- SEP 1918

OFFICE OF THE DEPUTY COMMISSIONER
 MYSORE DISTRICT,

Dated ~~Mysore~~ 31st August 1918

FROM

K. Mathan Esq, B A ,
 DEPUTY COMMISSIONER, MYSORE DISTRICT

TO

B. Ramaswamiya, Esq, B A , B L ,
 SECRETARY TO THE GOVERNMENT
 OF HIS HIGHNESS THE MAHARAJA OF MYSORE,
~~REVENUE DEPARTMENT~~ REVENUE DEPARTMENTS

SIR,

With reference to your letter No 6011M1 134-7-3 dated 27th April 1918 forwarding a copy of Sanitary Commissioner's letter of the 12th March 1918 in regard to the improvement of the sanitation of the Seringapatam town proposed by him as the result of the Mala--rial survey of the place, I have the honor to state that the matter -- was placed before the council at their meeting held on the 25th May-1918. It is seen from the enclosed copy of their resolution that ~~work~~ action has been taken for removing rank vegetation and work to the extent of Rs 432 has already been executed. The council have resolved that the five items of work mentioned in the margin of your letter under reply would be taken up and completed soon, that they cannot--undertake any other items of work and that Government might be approached for the execution of other works from State Funds.

The financial condition of the Municipality is not in a good condition and there are no means of improving it in the near future. The annexed table shows the income and expenditure of the -- -- -- for the past 3 years as sanctioned in the budget estimates

Year	Probable opening balance	Probable receipts	Probable expenditure	Probable closing balance	Normal income	Normal expenditure
1916-17	13610	11545	14287	10327	10645	13287
1917-18	5000	12755	12908	4827	10735	11908
1918-19	7200	9205	12220	4478	1180	11120

8/15

100

From

H. K. M. H. H. Esq, B A,
Deputy Commissioner,
Mysore District

To

B. Ramasewamaya Esq, B A B
Secy to Govt of Mysore,
Genl & Rev Depts

Dated

Despatched

31st August 1918

Received

13701

General No
No

22 bis 72 LB

Enclosure No 1

Submitting proposals
for financing the
several items of
improvement to
Seringapatam Town

Refers

M

4/

The actual receipts for these three years aggregated Rs 28771 and - the total expenditure amounted to Rs 29395 This gives an average - income of Rs 9590 and an average expenditure of Rs 9800 per year. The above figures show that both the normal and the actual expenditure have been in excess of the actual and normal income

3 In these circumstances the council are not in a position to - undertake the execution of any other works than those mentioned in your letter under advertence I quite agree with the Sanitary Commissioner in his opinion that the rest of the works are beyond the means of the council and that they should be executed either through Public Works Department or from grants to the council

4 Having regard to the financial condition of the Municipality as stated above it may appear that even the items which the Municipal Council have agreed to take up are beyond the means of the Council, but there are large arrears to be collected, and I learn that the present President is taking vigorous measures to collect them There is a prospect of a good portion of the arrears being - collected, and the council can therefore undertake the cost of --- these five items, but nothing more

5 I have the honor to recommend therefore that Government may be pleased to direct the execution of the remaining items of work from State Funds under the supervision of the Public Works Department

I have the honor to be

Sir,

Your most obedient servant,



Deputy Commissioner,

Mysore District



ಮೈಸೂರು ರಾಜ್ಯದ ಸರ್ಕಾರದಿಂದ ಸಿದ್ಧಪಡಿಸಿದ
ಮಾಹಿತಿಗಳು ಸರಿಯಾಗಿವೆ.

- 1 Mr SA జనరల్స్ వరల
- 2 ,, గార్డ్స్ బండ్స్ వరల
- 3 ,, జనరల్స్ వరల గానాల్స్
- 4 ,, జనరల్స్

Recorded

Recorded

Read and Recorded

Recombined

[illegible]

Read letter no 30946 B from the 17-18

To be brought up at the
beginning of next year

(sd) C. B. Lakshmanadas
President

To be brought up at the
beginning of next year

(sd) C. B. Lakshmanadas
President

Proceedings of the Government of H.H.
the Maharaja of Mysore.

Read -

G.O.No.5040-3/M.147-15-15 dated
28-2-1917 directing, among other things
the Malarial Survey of Seringapatam.

Letter No.G.C.397 dated 12-2-1918 --
from the Sanitary Commr.in Mysore, for-
warding the report on the Malarial Sur-
vey of Seringapatam and suggesting cer-
tain anti-malarial measures to be under-
taken for the improvement of the Town.

Correspondence ending with letter -
No.D2.Dis.72/L.B.18-19 dated 31-8-1918
from the D.C. Mysore, forwarding a report
together with a copy of the resolution -
of the Muni. Council of Seringapatam in
the matter of carrying out certain im-
provements referred to in the Sanitary
Commr's report.

Order--No.

Dated

15430-32

2nd 164-17-8
29/5/1919

1. Govt. have perused with interest -
the report of the Sany. Commr. on the -
malarial survey of ~~the~~ Seringapatam --
which emphasises what has already been
repeatedly noticed by Govt. viz., the
neglected and insanitary condition of
this historic place.

2. The report discloses that the po-
pulation of the town during the last --
three decades, has been steadily declin-
ing and that for a number of years past
there has been an increase of deaths -

or or ---

44

over births. The population ^{which} in 1891 was 12537 fell down to 7372 in 1911.

3. The main causes that have led to the deterioration of the place are the absence of a proper system of drainage and of water supply and the existence as a consequence of a number of malaria breeding pools. The growth of rank vegetation in the place is also another grave evil. The execution of certain works, considered desirable was ordered in the C.O. of the 25-2-1917. An estimate for Rs.2627 for the closing of the Karanjees has since been sanctioned in G.O. No.580-1/11.159-17-5 dated 8-7-1918 and the question of water supply to the town is separately under the consideration of Govt. The former measure will, it is hoped, minimise the extent to which

/for improvement in some measure,

has been

malaria is now prevalent in the locality. From among the anti-malarial measures recommended by the San'y. Commr. the Muhl. Cl. were consulted as regards the execution of the marginally noted works out of their funds, which they have agreed to carry out. The Dy. Commr. is requested to report how far these have been given effect to.

- x (1) Filling up or covering up works not in use.
- (2) Having furnished wire gauze covers for wells constantly in use.
- (3) Demolition of delapidated houses and keeping sites free of rank vegetation
- (4) Keeping back-yards of inhabitants' houses free of rank vegetation.
- (5) Covering up brick making and pits in places and preventing new ones being made.

2

5. The following items of work recommended by the San'y. Commr. for execution out of State Funds will be separately considered in connection with the water supply and drainage schemes to the town under investigation. The Chief Engineer will be requested to expedite the submission

45

The Ch. has
a number of
alluvial
fields

submission of the drainage scheme along
with the opinion of the Central Sanitary
Board. He is also requested to see ---
whether all the items indicated here-
under come within the purview of the ---
drainage scheme, and that in case any of
them do not come thereunder, separate --
action may be suggested with regard to &
them.

Shrin the
main the

- (1) Closing of Karanjees.
 - (2) Filling up the moat near the main road
 - (3) Draining marshy land opposite -
dispersion bridge.
 - (4) Draining the river channel north
of the north fort wall.
 - (5) Dealing with weeds and pools in
Daria Dowlat Bag.
 - (6) Preventing wet cultivation round
the Daria Dowlat Bag.
- A complete drainage scheme which
should be worked out before a -
water supply project is begun.

Item 7 was enough to be
is reported

5. The question of financing these
works will also then be considered.

6. The San'y. Commr. reports that it is pos-
sible to convert the very pools which --
are now the breeding places for *Anopheles*
mosquitoes to breeding pools for *Labeo*
destroying fish and beetles. He is --
requested to propose a suitable organi-
sation for the purpose in consultation
with the Munl. Council and the Deputy
Commr of the Mysore Distt. The results
of this experiment will be created be-
fore taking up the question of shifting
wet cultivation round the Daria Dowlat
Bag to a distance, which is a measure --
both costly and urgent.

This is only
water &
health

W.H.

for Secy. & Govt.

1190 and 164-17-21
9-11-20, Dis. 2428/19-20
10-11-20, Dis. 2428/19-20
and one

46

Office of the Deputy Commissioner,
Mysore District,

Dated, Mysore, the 15th September 1919

From

M. F. Downing, Esquire,
Deputy Commissioner, Mysore District,

Mysore

To

B. Rameswamy, Esq., B.A., B.L.,

Secretary to the Government of M.H.

the Maharaja of Mysore, Revenue Department,

Bangalore

Sir,

Referring to para 4 of Government Proceedings No R 15430-22/
Ml 134-17-19 dated the 22nd May 1919 calling for a report as to -
what progress had been made in the execution of the marginally noted

1 Milling up or covering up wells not in use	works in Srirangapatna Municipality in connection with the Anti Malarial measures proposed by the Sanitary Commissioner, I have the
2 Having fine meshed wire gauze covers for wells constantly in use	
3 Demolition of dilapidated houses and keeping sites free of rank vegetation	
4 Looping back yards of inhabited houses free of rank vegetation	
5 Covering up brick making pits now in Gangam and preventing new ones being made	

----- honour to state that the council are of opinion that the work of putting meshed wire gauze covers to wells in use is impracticable. They have resolved that action under Section 131 of the Municipal Regulation would be taken in respect of items Nos 3 and 4, that necessary action would be taken to prevent the execution of new brick making pits and that the wells -- not -- would be closed. A copy of the council resolution is enclosed.

I have the honour to be,
Sir,
Yours faithfully,
M. F. Downing,

2

M. F. Downing,
Deputy Commissioner,

From The Deputy Commissioner
Mysore District,
84/5
Mysore.

To The Secretary to the Gov
of H. H. the Maharaja of
Mysore, Revenue Deputy
Bangalore

Dated 15th September 1916

Despatched 17th September 1916

Received

19 SEP 1916

General No.

Enclosure No.

S u b j e c t.

Reporting on the progress
in the execution of certain s
tary works in Srirangapatam Mu
cipality.

- C:-

MS

MS

512-18

[illegible]

in use, is, in the
opinion of the Council,
impracticable

3) As regards the third
& fourth points, action
will be taken under
section 131 of the Muni-
cipal Regulation

4) Necessary action will
be taken to prevent the
excavation of new pits

It was further re-
solved that these classes
of work should be
taken up, as funds
permit

Sd/ K V Anantharaman
President

" Copy "
M. S. S. S. S.
For President

